

EPA Registration No.  
82100-1  
Vol. 4

# PROCESSING REQUEST

Reg # 82100-1

Decision # 529877

Description: Acceptable label amendment -  
addition of two sublabels

**Electronic Label & Letter**  
(see PPLS):

OR

**Non Electronic  
Label & Letter**  
(Scanning required):

☒ Dated: 8/8/17

☐ Dated:

\*\*\*Only one label type should be selected\*\*\*

**Other Materials Sent** (see jacket):

☐ New CSF(s) Dated:

☐ Other:

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Alex Horansky

Division: BPPD

Phone: 703-347-0128

Date: 8/8/17

# Product & Regulatory Associates, L.L.C.

May 18 2017

Mr. Andrew Bryceland, Team Leader  
Document Processing Desk (AMEND)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Subject: Sil-MARTIX™ Fungicide/Miticide/Insecticide  
EPA Reg. No. 82100-1  
Fast Track Label Amendment without data

Dear Mr. Bryceland:

As an authorized representative of PQ Corporation, I am submitting a fast track label amendment for Sil-MATRIX™ Fungicide/Miticide/Insecticide, EPA Reg. NO. 82100-1.

The objective of this label amendment is to create two new sub-labels to reflect commercial and LCO applications and for residential use in small packages.

In addition, the label was upgraded to include proper trade mark presentation of Sil-MATRIX.

As outlined in the enclosed letter from PQ Corporation, I have been appointed as an authorized representative to coordinated this regulatory action. The current agent and address on file for the PQ Corporation should not change. But for any dialogue on this request, please contact me as indicated here.

To complete this registration amendment application, enclosed please find:

- Application for Pesticide Registration (EPA Form 8750-1)
- Cover letter
- PQ Corporation Authorization Letter dated April 28, 2017
- Proposed master with sub-labels (3 copies)
- E-Label Disk 082100-00001.20170515.Amendment.pdf
- Certification with Respect to Label Integrity.

8595 Collier Blvd.

Suite 107-51  
Telephone: 609.841.8288

Naples, FL 34114

May 18, 2017

Page 2 of 2

I trust that this information will assist the Agency in its efforts to complete this registration amendment application. If you have any question in regard to this mater, feel free to contact me at (609)841-8288 or JWrightCH@comcast.net.

Sincerely,



John F. Wright

Authorized Representative of PQ Corporation

cc: Barry Schwartz, PQ Corporation



8595 Collier Blvd.

Suite 107-51  
Telephone: 609.841.8288

Naples, FL 34114



PO Box 840  
Valley Forge, PA 19482  
610-651-4441

April 28, 2017

Document Processing Desk (COADR)  
Office of Pesticide Programs (7504C)  
U. S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

To Whom It May Concern:

PQ Corporation, EPA Company Number 82100, will be submitting an amendment registration application for Sil-Matrix™ Fungicide/Miticide/Insecticide, EPA Reg. No. 82100-1. Please be informed that

John F. Wright  
Product & Regulatory Associates, LLC  
8595 Collier Blvd., Suite 107-51  
Naples, FL 34114

is authorized to act as an agent for our interactions with the EPA on this specific pesticide matter.

Please do not change the current agent name and address on file for the PQ Corporation.

If you need additional information or have any questions, feel free to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Barry', followed by a long horizontal flourish.

Barry Schwarz  
Business Director, Specialty Silicates  
North America





United States  
**Environmental Protection Agency**  
Washington, DC 20460

Registration  
Amendment  
Other

OPP Identifier Number

### Application for Pesticide - Section I

1. Company/Product Number 82100-1	2. EPA Product Manager Andrew Bryceland	3. Proposed Classification  <input checked="checked" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Sil-MATRIX Fungicide/Miticide/Insecticide	PM# Team Leader	
5. Name and Address of Applicant (Include ZIP Code)  PQ Corporation c/o Ag-Chem Consulting 12208 Quinque Lane Clifton, VA 21024 <input type="checkbox"/> Check if this is a new address		6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____  Product Name _____

## Section - II

☒ Amendment - Explain below.

☐ Resubmission in response to Agency letter dated \_\_\_\_\_

☐ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated \_\_\_\_\_

☐ "Me Too" Application.

☐ Other - Explain below.


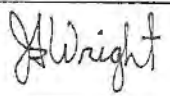
**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Expand master label to include two sub-labels for commercial & LCO applications and for residential use in small packages as outlined in the cover letter.

### Section - III

1. Material This Product Will Be Packaged In:				
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
* Certification must be submitted		If "Yes" Unit Packaging wgt.      No. per container		If "Yes" Package wgt.      No. per container
2. Type of Container				
<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____				
3. Location of Net Contents Information		4. Size(s) Retail Container		5. Location of Label Directions
<input checked="" type="checkbox"/> Label <input checked="" type="checkbox"/> Container		8, 16, 32 oz & 1, 2.5, 5, 30 gal		<input checked="" type="checkbox"/> On container
6. Manner in Which Label is Affixed to Product		<input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input checked="" type="checkbox"/> Stenciled <input type="checkbox"/> Other _____		

## Section - IV

1. Contact Point <i>(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</i>			
Name John F. Wright		Title Authorized Representative PQ Corporation	Telephone No. (Include Area Code) 609.841.8288
<b>Certification</b>  I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received  <b>(Stamped)</b>  
2. Signature 		3. Title Authorized Representative PQ Corporation	
4. Typed Name John F. Wright		5. Date 5/18/17	
<b>6</b>			

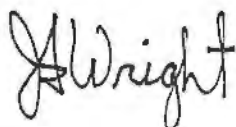
# Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
82100-1	May 18, 2017	082100-00001.20170515.Amendment.pdf

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

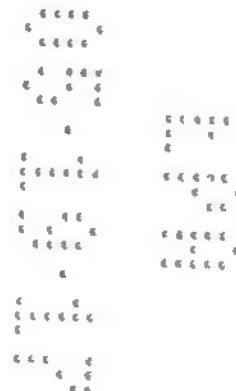


Signature

5/18/17  
Date

John F. Wright  
Name (typed)

Authorized Representative  
Title





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460**

**OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION**

August 8, 2017

John F. Wright  
Authorized Representative  
PQ Corporation  
c/o Ag-Chem Consulting  
12208 Quinque Lane  
Clifton, VA 21024

**Subject:** Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Acceptable  
Addition of Sublabels  
Product Name: Sil-MATRIX Fungicide/Miticide/Insecticide  
EPA Registration Number: 82100-1  
Application Date: 5/18/2017  
OPP Decision Number: 529877

Dear Mr. Wright:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration



Page 2 of 2  
EPA Reg. No. 82100-1  
OPP Decision No. 529877

process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Alex Horansky by phone at (703) 347-0128 or via email at [horansky.alex@epa.gov](mailto:horansky.alex@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew C. Bryceland". The signature is fluid and cursive, with the first name "Andrew" and last name "Bryceland" clearly distinguishable.

Andrew Bryceland, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

**ACCEPTED**

08/08/2017

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide to remain under EPA Reg. No. 82100-1

**Sil-MATRIX**

FUNGICIDE/MITICIDE/INSECTICIDE

 **FOR ORGANIC PRODUCTION**



For Organic Use

**FUNGICIDE/MITICIDE/INSECTICIDE**

For use on vegetables, fruits, nuts, vine crops, field crops, ornamentals and turf for control of fungal diseases, and control of spider mites, aphids, whiteflies.

**ACTIVE INGREDIENT:**

Potassium Silicate.....29%

OTHER INGREDIENTS:.....71%

Total 100%

EPA Reg. No. 82100-1 EPA Est. No. 82100-PA-001

Net Weight [565 lbs 55 Gal or 25 lbs 2.5 gal]

**Keep Out of Reach of Children**

**CAUTION PRECAUTION**

**See attached booklet for additional  
Precautionary Statements and  
Directions for Use**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

First Aid	
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present,

	after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin	Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>HOT LINE NUMBER:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Product Safety Hotline 1-866-359-5667 day or night, for emergency medical treatment information.	

**Manufactured by:**

PQ Corporation

P.O. Box 840

Valley Forge, PA 19482

800-944-7411

**Precautionary Statements**

**Hazards to Humans and Domestic  
Animals**

Caution: Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles or face shield when handling concentrate. After product is diluted in accordance with the directions for use, goggles or face shield are not required. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear appropriate personal protective equipment (PPE).

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes and socks.
- Chemical resistant gloves
- Goggles or face shield when handling undiluted concentrate

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:**

Users should:

- Remove clothing immediately if pesticide gets inside.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS:**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

In the event of an in-transit environmental release or spill of this product, that may endanger the environment, call Chemtrec at 1-800-424-9300.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is attached.**

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks
- Goggles or face shield when handling undiluted concentrate

#### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated area until sprays have dried.

#### **GENERAL USE INFORMATION**

Sil-MATRIX™ is a broad spectrum preventative fungicide recommended for agricultural crops, fruits, nuts, vines, turf and ornamentals. Optimum disease control is obtained when the fungicide is applied on a regularly scheduled preventative spray program. Sil-MATRIX™ also provides control of mites, aphids, whiteflies. Optimum performance is achieved using a sufficient volume of water to insure complete coverage of all stems and foliage.

Sil-MATRIX™ is for use on Ornamental Turf Lawns (Residential, Industrial and Institutional), Parks, cemeteries, Athletic Fields and Golf Courses (Fairways, Aprons, Tees, and Roughs), and similar turf areas. Also for use on Sod Farms.

Since all combinations or sequences of pesticide applications including surfactants and adjuvants have not been tested, before wide spread application, test a small area to be sprayed first to make certain that no phytotoxicity occurs.

Avoid contact with glass. Remove promptly from glass surfaces. Read the entire label before using Sil-MATRIX™. Consult your State Agricultural Experimental Station or Extension Service Specialist for additional information on application timing, rates and any additional requirements or restrictions.

#### MIXING INSTRUCTIONS:

Be sure the sprayer is clean and not contaminated with other materials prior to use. When using an agitated spray tank fill tank 1/2 to 3/4 full with clean water and start agitation. Be certain that the agitation system is working properly. With the agitator running add the required amount of Sil-MATRIX™ to the tank. If tank mixing with other materials, add them to the tank and continue agitation. Continue filling tank with the remainder of the water. Agitate until mixed thoroughly and avoid excessive foaming. Mix as needed; do not store diluted material.

#### COMPATIBILITY:

Sil-MATRIX™ is compatible with most commonly used agricultural pesticides. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Dilute Sil-MATRIX™ to its use rate and then with stirring add the other components in the appropriate amounts. If precipitation, gelation, or sedimentation occurs, do not use the combination of pesticides. Because of the wide variety of possible combinations that can be encountered, observe all precautions and limitations on the label of all products used in mixtures.

#### APPLICATION INSTRUCTIONS:

Sil-MATRIX™ is a broad spectrum pesticide for control of the fungal disease powdery mildew, and control of mites, aphids, whiteflies vegetables, fruits, nuts, vine crops, agronomic crops, and ornamentals; for control of gray mold rot (*Botrytis cinerea*) on blueberry; for suppression of Asian soybean rust on soybean, and for suppression of gray leaf spot, brown patch, dollar spot, and snow mold on turf.

Rate of application is variable according to pest pressure, timing of sprays and plant stage of growth. Use lower rates under light to moderate pest pressure; higher rates under heavy pest pressure and for mite control. Arid climates generally require higher rates.

**For all crops, apply Sil-MATRIX™ at a volume to volume concentration of 0.25% to 1% spray solution, unless otherwise specified.** For example, 1-4 quarts per 100 gallons of water. See Dilution Table for other volumes. Apply on a preventative schedule for disease control. Begin applications when environmental conditions are conducive to disease development. Repeat applications no sooner than every 7 days. When conditions are conducive for rapid disease development, it is recommended that Sil-MATRIX™ be used in a rotational program with other registered fungicides. For mite and insect control, begin applications when pests first appear and repeat applications as necessary to maintain control, but no sooner than every 7 days. For best results, apply Sil-MATRIX™ before leaf hardening.

**For maximum results, use a high analysis non-ionic surfactant such as No-Foam A at recommended label rates.**

DILUTION TABLE FOR FOLIAR APPLICATIONS (20-250 gallons per acre)				
Gal Water	Quarts Sil-Matrix™ 0.25% Sol.	Quarts Sil-Matrix™ 0.5% Sol.	Quarts Sil-Matrix™ 0.75% Sol.	Quarts Sil-Matrix™ 1% Sol.
20	0.2 qts	0.4 qts	0.6 qts	0.8 qts
40	0.4 qts	0.8 qts	1.2 qts	1.6 qts
50	0.5 qt	1 qt	1.5 qts	2 qts
100	1 qts	2 qts	3 qts	4 qts
150	1.5 qts	3 qts	4.5 qts	6 qts
200	2 qts	4 qts	6 qts	8 qts
250	2.5 qts	5 qts	7.5 qts	10 qts

qts = quarts Gal= gallons

**For fruit, nut and vine crops:** apply 0.25% to 1% solution (1-4 quarts Sil-MATRIX™/100 gal.) in 50 to 250 gallons finished spray per acre.

#### Specific Use Restrictions:

1. Apply up to the day of harvest (0 day PHI).
2. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.

3. Do not apply more than 20 gallons per acre (60 lb ai/a) per season.
4. Do not make post harvest applications.

**For vegetable crops and other agronomic crops:** apply 0.25% to 1% solution (1-4 quarts Sil-MATRIX™/100 gal.) in 50 to 250 gallons finished spray per acre.

Specific Use Restrictions:

1. Apply up to the day of harvest (0 day PHI).
2. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.
3. Do not apply more than 20 gallons per acre (60 lb ai/a) per season.
4. Do not make post harvest applications.

**For ornamental crops:** apply 0.25% to 1% solution (1-4 quarts Sil-MATRIX™/100 gal.) making sure to get good coverage of the foliage. Apply in 20 to 250 gallons of water per acre.

Specific Use Restrictions:

1. Do not apply more than 10 quarts per acre (7.5 lb ai/a) per application.
2. Do not apply more than 15 gallons per acre (45 lb ai/a) per season.

**For turf use:** apply 1% to 2% solution (4-8 quarts Sil-MATRIX™/100 gal.) in a minimum of 40 gallons finished spray per acre [or 1 gallon finished spray per 1000 ft²].

Specific Use Restrictions:

1. Do not apply more than 8 quarts per acre (6.0 lb ai/a) per application. [Do not apply more than 5.8 fluid ounces per 1000 ft² (0.14 lb ai/1000 ft²) per application.]
2. Do not apply more than 10 gallons per acre (30 lb ai/a) per season. [Do not apply more than 29 fluid ounces per 1000 ft² (0.7 lb ai/1000 ft²) per season.]

**DISEASE MONITORING:**

Sil-MATRIX™ is a broad spectrum, preventative fungicide. If not applied on a routine protectant spray schedule, observe plants for disease signs or symptoms. Apply appropriate fungicide, at the listed label use rate and spray schedule, at the first sign of disease, report of disease in the area, or during environmental conditions favorable for disease development.

**OUTDOOR AND GREENHOUSE CROPS:  
POME FRUIT, NUT CROPS, STONE FRUITS**

(Including but not limited to)

Apples	Crabapple	Loquat
Mayhaw	Pear	Quince

Apricot	Cherry	Nectarine
Peach	Plum	Prune
Almond	Beech nut	Filbert
Butternut	Cashew	Chestnut
Chinquapin	Brazil nut	Macadamia
Hickory	Pecan	Walnut

**BERRIES AND VINE CROPS  
(Including but not limited to)**

Blackberry	Blueberry	Gooseberry
Loganberry	Raspberry	Strawberry
Grapes		

**ROOT & BULB VEGETABLES  
(Including but not limited to)**

Beet, garden	Chicory	Rutabaga
Beet, sugar	Ginseng	Salsify
Horseradish	Carrot	Parsley root
Celeriac	Radish	Turnip
Chervil	Potato	Cassava
Ginger	Sweet Potato	Yam
Garlic	Leek	
Onion	Shallot	

**LEAFY & BRASSICA VEGETABLES  
(Including but not limited to)**

Arugula	Celery	Endive
Fennel	Parsley	Radicchio
Rhubarb	Spinach	Swiss chard
Broccoli	Brussels sprouts	Cabbage
Cauliflower	Collards	Kale
Kohlrabi	Mustard Greens	Lettuce

**LEGUME VEGETABLES  
(Including but not limited to)**

Beans	Broad bean	Chickpea
Lentil	Pea	Soybean

**CUCURBIT & FRUITING VEGETABLES  
(Including but not limited to)**

Cucumber	Gherkin	Pumpkin
Muskmelon	Squash	Watermelon
Eggplant	Pepper	Tomato

**CITRUS FRUITS  
(Including but not limited to)**

Grapefruit	Orange	Lime
Lemon	Mandarin	Pummelo
Tangerine		

**CEREAL GRAINS  
(Including but not limited to)**

Barley	Oats	Sorghum
Popcorn	Corn	Rice
Wheat	Millet	Rye
Wild rice		

**ADDITIONAL CROPS  
(Including but not limited to)**

Artichoke	Asparagus	Chayote
Coffee	Cotton	Hops
Jobba	Ornamental	Pistachio
Turf grass	Industrial Hemp*	Tobacco
Sesame	Sunflower	Tea
Grass grown for Seed		

\*Non-Food Use

## TURF & ORNAMENTALS

(Including but not limited to broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants.)

**IMPORTANT NOTE:** Plant sensitivities to Sil-MATRIX™ have been found to be acceptable for plants listed on this label; however, it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Sil-MATRIX™. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Sil-MATRIX™ can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Sil-MATRIX™ can be used safely prior to commercial use. In a small area, apply the listed rates to the plants in question, i.e. foliage, fruit, etc., and observe for 7-10 days for symptoms of phytotoxicity prior to commercial use. **Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.**

### BROADLEAF SHRUBS & TREES

Andromeda	Ash	Aspen
Azalea	Buckeye	Camellia
Cherry Laurel	Crabapple	Dogwood
Eucalyptus	Euonymus	Firethorn
Flowering almond	Hawthorn	Holly
Flowering peach	Laurel	Lilac
Flowering quince	Magnolia	Maple
Flowering cherry	Oak	Red-Tip
Flowering plum	Poplar	Privet
Rhododendron	Sequoia	Spirea
Sycamore	Viburnum	Walnut

### FLOWERING PLANTS & BULBS

African violet	Begonia	Carnation
Chrysanthemum	Crocus	Daffodil
Daisy	Geranium*	Gladiolus
Hollyhock	Hydrangea	Iris
Lily	Marigold*	Narcissus
Pansy*	Petunia*	Phlox
Rose	Statice	Tulip
Zinnia		

\*NOTE: Do not apply foliar sprays of Sil-MATRIX™ to open blooms of these species.

### FOLIAGE PLANTS

Aglaonema	Palm	Artesia
Boston fern	Dracaena	Dumbcane
Fatsia	Ficus	Ruffle fern
Lipstick plant	Ming aralias	Oyster plant
Pachysandra	Parlor palm	Peperomia
Philodendron	Prayer plant	Syngonium
Zebra plant	Leatherleaf fern	

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**Storage:** Keep pesticide in original container. Keep container tightly closed when not in use. Store product above 40°F. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Protect from excessive heat. Store in a cool, dry place.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

For nonrefillable containers with capacities equal to or less than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For nonrefillable containers with capacities greater than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Batch or Lot Code #

## Limited Warranty and Limitations of Liability and Remedies

**Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return unopened container at once to the seller for full refund of purchase price paid.**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control or suppression of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of PQ Corporation or the seller. PQ Corporation recommends that the user or grower test this product on a portion of the crop to determine suitability for the intended use. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment.

PQ Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label

when used in strict accordance with the directions, subject to the factors noted above which are beyond the control of PQ Corporation. To the extent allowed by law, the PQ Corporation makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent allowed by law, the exclusive remedy against PQ Corporation for any cause of action relating to the handling or use of this product shall be limited to, at PQ Corporation's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

To the extent allowed by law, PQ Corporation shall not be liable and any and all claims against PQ Corporation are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. PQ Corporation and the seller offer this product, and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

Sil-MATRIX™ is a registered trademark of PQ Corporation.

AS25-1007

**SUPPLEMENTAL  
LABELING  
Si-MATRIX™  
FUNGICIDE/MITICIDE/INSECTICIDE**

**Chemigation Application Instructions  
GENERAL INFORMATION:**

Apply this product only through drip (trickle); sprinkler (solid set, lateral move, end tow, sideroll, center pivot, or hand move); flood (basin); furrow; or border irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement Injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

**DRIP TRICKLE CHEMIGATION:**

1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from



the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

#### **SPRINKLER CHEMIGATION:**

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed,

solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional Interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply when soils are moderately moist. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.
8. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **FLOOD (BASIN), FURROW AND BORDER CHEMIGATION:**

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic

discontinuity such as a drop structure or wear box to decrease potential of water source contamination from the backflow if water flow stops.

2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump), effectively designed and constructed of materials that are

compatible with pesticides and capable of being fitted with a system interlock.

3. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

[Sub-label for Commercial and LCO Applicators]

# **Si-MATRIX™**

FUNGICIDE/MITICIDE/INSECTICIDE

 **FOR ORGANIC PRODUCTION**



## **FUNGICIDE/MITICIDE/INSECTICIDE**

For use on ornamentals and turf for control of fungal diseases, and control of spider mites, aphids, whiteflies.

### **ACTIVE INGREDIENT:**

Potassium Silicate.....29%

OTHER INGREDIENTS:.....71%

Total 100%

EPA Reg. No. 82100-1 EPA Est. No. 82100-PA-001  
Net Weight [1 qt. (32 fl. oz.), 1 gallon (128 fl. oz.)2.5  
gallon]

**Keep Out of Reach of Children**  
**CAUTION PRECAUCION**

**See attached booklet for additional  
Precautionary Statements and  
Directions for Use**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

First Aid	
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin	Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>HOT LINE NUMBER:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Product Safety Hotline 1-866-359-5667 day or night, for emergency medical treatment information.	

### **Manufactured by:**

PQ Corporation  
P.O. Box 840  
Valley Forge, PA 19482  
800-944-7411

## **Precautionary Statements**

### **Hazards to Humans and Domestic Animals**

Caution: Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles or face shield when handling concentrate. After product is diluted in accordance with the directions for use, goggles or face shield are not required. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear appropriate personal protective equipment (PPE).

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes and socks.
- Chemical resistant gloves
- Goggles or face shield when handling undiluted concentrate

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **USER SAFETY RECOMMENDATIONS:**

Users should:

- Remove clothing immediately if pesticide gets inside.
- Remove PPE immediately after handling this product. Wash the outside of gloves before

removing. As soon as possible, wash thoroughly and change into clean clothing.

---

**ENVIRONMENTAL HAZARDS:**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

In the event of an in-transit environmental release or spill of this product, that may endanger the environment, call Chemtrec at 1-800-424-9300.

---

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

---

**PRODUCT USE INFORMATION**

Sil-MATRIX™ is a broad spectrum preventative fungicide suggested for use on turf and ornamentals. Optimum disease control is obtained when the fungicide is applied on a regularly scheduled preventative spray program. Sil-MATRIX™ also provides control of mites, aphids, whiteflies. Optimum performance is achieved using a sufficient volume of water to insure complete coverage of all stems and foliage.

Sil-MATRIX™ is intended for aesthetic use on Ornamentals and Turf Lawns (Residential, Industrial and Institutional), Parks, cemeteries, Athletic Fields and Golf Courses (Fairways, Aprons, Tees, and Roughs), and similar turf areas.

Since all combinations or sequences of pesticide applications including surfactants and adjuvants have not been tested, before wide spread application, test a small area to be sprayed first to make certain that no phytotoxicity occurs.

Keep people and pets out of the treated area until spray has dried.

Avoid contact with glass. Remove promptly from glass surfaces. Read the entire label before using Sil-MATRIX™. Consult your State

Agricultural Experimental Station or Extension Service Specialist for additional information on application timing, rates and any additional requirements or restrictions.

**MIXING INSTRUCTIONS:**

Be sure the sprayer is clean and not contaminated with other materials prior to use. When using an agitated spray tank fill tank 1/2 to 3/4 full with clean water and start agitation. Be certain that the agitation system is working properly. With the agitator running add the required amount of Sil-MATRIX™ to the tank. If tank mixing with other materials, add them to the tank and continue agitation. Continue filling tank with the remainder of the water. Agitate until mixed thoroughly and avoid excessive foaming. Mix as needed; do not store diluted material.

**COMPATIBILITY:**

Sil-MATRIX™ is compatible with most commonly used agricultural pesticides. If compatibility is in question, use the compatibility jar test before mixing a whole tank. Dilute Sil-MATRIX™ to its use rate and then with stirring add the other components in the appropriate amounts. If precipitation, gelation, or sedimentation occurs, do not use the combination of pesticides. Because of the wide variety of possible combinations that can be encountered, observe all precautions and limitations on the label of all products used in mixtures.

**APPLICATION INSTRUCTIONS:**

Sil-MATRIX™ is a broad spectrum pesticide for control of the fungal disease powdery mildew, and control of mites, aphids, whiteflies on and ornamentals, and for suppression of gray leaf spot, brown patch, dollar spot, and snow mold on turf.

Rate of application is variable according to pest pressure, timing of sprays and plant stage of growth. Use lower rates under light to moderate pest pressure; higher rates under heavy pest pressure and for mite control. Arid climates generally require higher rates.

Apply on a preventative schedule for disease control. Begin applications when environmental conditions are conducive to disease development. Repeat applications no sooner than every 7 days. When conditions are conducive for rapid disease development, it is suggested that Sil-MATRIX™ be used in a rotational program with other registered

fungicides. For mite and insect control, begin applications when pests first appear and repeat applications as necessary to maintain control, but no sooner than every 7 days. For best results, apply Sil-MATRIX™ before leaf hardening.

**For maximum results, use a high analysis non-ionic surfactant such as No-Foam A at listed label rates.**

**For ornamental crops:** apply 0.25% to 1% solution (1-4 quarts Sil-MATRIX™/100 gal.) making sure to get good coverage of the foliage. Apply in 20 to 250 gallons of water per acre. See Dilution Table for other volumes.

Specific Use Restrictions:

1. Do not apply more than 7.35 fluid ounces per 1000 ft<sup>2</sup> (0.18 lb. ai/1000 ft<sup>2</sup>) per application.
2. Do not apply more than 58.8 fluid ounces per 1000 ft<sup>2</sup> (1.18 lb. ai/1000 ft<sup>2</sup>) per season.

DILUTION TABLE FOR FOLIAR APPLICATIONS (20-250 gallons per acre)				
Gal Water	Quarts Sil-Matrix™ 0.25% Sol.	Quarts Sil-Matrix™ 0.5% Sol.	Quarts Sil-Matrix™ 0.75% Sol.	Quarts Sil-Matrix™ 1% Sol.
20	0.2 qts	0.4 qts	0.6 qts	0.8 qts
40	0.4 qts	0.8 qts	1.2 qts	1.6 qts
50	0.5 qt	1 qt	1.5 qts	2 qts
100	1 qts	2 qts	3 qts	4 qts
150	1.5 qts	3 qts	4.5 qts	6 qts
200	2 qts	4 qts	6 qts	8 qts
250	2.5 qts	5 qts	7.5 qts	10 qts

qts = quarts Gal= gallons

**For turf use:** apply 1% to 2% solution (4-8 quarts Sil-MATRIX™/100 gal.) in a minimum of 40 gallons finished spray per acre [or 1 gallon finished spray per 1000 ft<sup>2</sup>].

Specific Use Restrictions:

1. Do not apply more than 8 quarts per acre (6.0 lb. ai/a) per application. [Do not apply more than 5.8 fluid ounces per 1000 ft<sup>2</sup> (0.14 lb. ai/1000 ft<sup>2</sup>) per application.]
2. Do not apply more than 10 gallons per acre (30 lb. ai/a) per season. [Do not apply more than 29 fluid ounces per 1000 ft<sup>2</sup> (0.7 lb. ai/1000 ft<sup>2</sup>) per season.]

**DISEASE MONITORING:**

Sil-MATRIX™ is a broad spectrum, preventative fungicide. If not applied on a routine protectant spray schedule, observe plants for disease signs or symptoms. Apply appropriate fungicide, at the listed label use rate and spray schedule, at the first sign of disease, report of disease in the area, or during environmental conditions favorable for disease development.

**TURF & ORNAMENTALS**

(Including but not limited to broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants.)

**IMPORTANT NOTE:** Plant sensitivities to Sil-MATRIX™ have been found to be acceptable for plants listed on this label; however, it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Sil-MATRIX™. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Sil-MATRIX™ can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Sil-MATRIX™ can be used safely prior to use. In a small area, apply the listed rates to the plants in question, i.e. foliage, fruit, etc., and observe for 7-10 days for symptoms of phytotoxicity prior to use. **Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.**

**BROADLEAF SHRUBS & TREES**

Andromeda	Ash	Aspen
Azalea	Buckeye	Camellia
Cherry Laurel	Crabapple	Dogwood
Eucalyptus	Euonymus	Firethorn
Flowering almond	Hawthorn	Holly
Flowering peach	Laurel	Lilac
Flowering quince	Magnolia	Maple
Flowering cherry	Oak	Red-tip
Flowering plum	Poplar	Privet
Rhododendron	Sequoia	Spirea
Sycamore	Viburnum	Walnut

**FLOWERING PLANTS & BULBS**

African violet	Begonia	Carnation
Chrysanthemum	Crocus	Daffodil
Daisy	Geranium*	Gladiolus
Hollyhock	Hydrangea	Iris
Lily	Marigold*	Narcissus
Pansy*	Petunia*	Phlox
Rose	Statice	Tulip
Zinnia		

**\*NOTE:** Do not apply foliar sprays of Sil-MATRIX™ to open blooms of these species.

**FOLIAGE PLANTS**

Aglaonema	Palm	Artesia
Boston fern	Dracaena	Dumbcane
Fatsia	Ficus	Ruffle fern
Lipstick plant	Ming aralias	Oyster plant

Pachysandra	Parlor palm	Peperomia
Philodendron	Prayer plant	Syngonium
Zebra plant	Leatherleaf fern	

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**Storage:** Keep pesticide in original container. Keep container tightly closed when not in use. Store product above 40°F. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Protect from excessive heat. Store in a cool, dry place.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

For nonrefillable containers with capacities equal to or less than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For nonrefillable containers with capacities greater than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Batch or Lot Code #

### Limited Warranty and Limitations of Liability and Remedies

**Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return unopened container at once to the seller for full refund of purchase price paid.**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control or suppression of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions

or good application practices, all of which are beyond the control of PQ Corporation or the seller. PQ Corporation recommends that the user or grower test this product on a portion of the crop to determine suitability for the intended use. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment.

PQ Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the factors noted above which are beyond the control of PQ Corporation. To the extent allowed by law, the PQ Corporation makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent allowed by law, the exclusive remedy against PQ Corporation for any cause of action relating to the handling or use of this product shall be limited to, at PQ Corporation's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

To the extent allowed by law, PQ Corporation shall not be liable and any and all claims against PQ Corporation are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. PQ Corporation and the seller offer this product, and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

[Optional Warranty] [Notice: To the extent consistent with applicable law, the Buyer assumes all responsibility for safety and performance if this product is not used according to the directions.]

Sil-MATRIX™ is a registered trademark of PQ Corporation.

[Sub-label for Residential Use in Small Packages]

● **FOR ORGANIC PRODUCTION**



### FUNGICIDE/MITICIDE/INSECTICIDE

For use on home garden vegetables, fruits, nuts, vine crops, crops, ornamentals and turf for control of fungal diseases, and control of spider mites, aphids, whiteflies.

**ACTIVE INGREDIENT:**

Potassium Silicate.....29%

**OTHER INGREDIENTS:**.....71%

**Total**.....100%

EPA Reg. No. 82100-1 EPA Est. No. 82100-PA-001  
Net Weight [ $\frac{1}{2}$ pt. (8 fl. oz.), 1 pt. (16 fl. oz.) 1 qt. (32 fl. oz.) or 1 gallon (128 fl. oz.)]

**Keep Out of Reach of Children**  
**CAUTION PRECAUCION**

**See attached booklet for additional  
Precautionary Statements and  
Directions for Use**

First Aid	
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin	Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**HOT LINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Product Safety Hotline 1-866-359-5667 day or night, for emergency medical treatment information.

**Manufactured by:**  
PQ Corporation  
P.O. Box 840  
Valley Forge, PA 19482  
800-944-7411

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

Caution: Causes moderate eye irritation. Do not get in eyes or on clothing. Wear safety glasses when handling concentrate. After product is diluted in accordance with the directions for use, safety glasses are not required. Wear long-sleeved shirt and long pants, shoes, socks and chemical resistant gloves. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

#### ENVIRONMENTAL HAZARDS:

To protect the environment do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in clear weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

In the event of an in-transit environmental release or spill of this product, that may endanger the environment, call Chemtrec at 1-800-424-9300.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### PRODUCT USE INFORMATION

Sil-MATRIX™ is a broad spectrum preventative fungicide suggested for use on home garden crops, fruits, nuts, vines, turf and ornamentals.

Optimum disease control is obtained when the fungicide is applied on a regularly scheduled preventative spray program. Sil-MATRIX™ also provides control of mites, aphids, whiteflies. Optimum performance is achieved using a sufficient volume of water to insure complete coverage of all stems and foliage.

Sil-MATRIX™ is intended for residential use on home garden crops, ornamentals and turf.

Keep people and pets out of the treated area until spray has dried.

Avoid contact with glass. Remove promptly from glass surfaces. Read the entire label before using Sil-MATRIX™. Consult your State Agricultural Experimental Station or Extension Service Specialist for additional information on application timing, rates and any additional requirements or restrictions.

#### **MIXING INSTRUCTIONS:**

Be sure the sprayer is clean and not contaminated with other materials prior to use. Fill spray tank 1/2 to 3/4 full with clean water. Add the required amount of Sil-MATRIX™ to the tank. Continue filling tank with the remainder of the water. Agitate until mixed thoroughly and avoid excessive foaming. Mix as needed; do not store diluted material.

#### **APPLICATION INSTRUCTIONS:**

Sil-MATRIX™ is a broad spectrum pesticide for control of the fungal disease powdery mildew, and control of mites, aphids, whiteflies on home garden vegetables, fruits, nuts, vine crops, crops, and ornamentals; for control of gray mold rot (*Botrytis cinerea*) on blueberry, and for suppression of gray leaf spot, brown patch, dollar spot, and snow mold on turf.

Rate of application is variable according to pest pressure, timing of sprays and plant stage of growth. Use lower rates under light to moderate pest pressure; higher rates under heavy pest pressure and for mite control. Arid climates generally require higher rates.

**For all crops, apply Sil-MATRIX™ at a volume to volume concentration of 0.25% to 1% spray solution, unless otherwise specified.** For example, 1/3 - 1 1/3 fluid ounces per 1 gallon of water. Use higher rates when insect or disease pressure is high. Apply as through coverage spray wetting the entire

foliage (including both the top and bottom sides of leaves) and branches to the point of run off. Do not allow run off to occur. Apply on a preventative schedule for disease control. Begin applications when environmental conditions are conducive to disease development. Repeat applications no sooner than every 7 days. When conditions are conducive for rapid disease development, it is recommended that Sil-MATRIX™ be used in a rotational program with other registered fungicides. For mite and insect control, begin applications when pests first appear and repeat applications as necessary to maintain control, but no sooner than every 7 days. For best results, apply Sil-MATRIX™ before leaf hardening.

#### Specific Use Restrictions:

1. Apply up to the day of harvest (0 day PHI).
2. Do not apply more than 7.35 fluid ounces per 1000 ft<sup>2</sup> (0.18 lb. ai/1000 ft<sup>2</sup>) per application.
3. Do not apply more than 58.8 fluid ounces per 1000 ft<sup>2</sup> (1.4 lb. ai/1000 ft<sup>2</sup>) per acre (60 lb. ai/a) per season.
4. Do not make post harvest applications.

**For ornamentals:** apply 0.25% to 1% solution (1/3 - 1 1/3 fluid ounces per 1 gallon of water). Use higher rates when insect or disease pressure is high. Apply as through coverage spray wetting the entire foliage (including both the top and bottom sides of leaves) and branches to the point of run off. Do not allow run off to occur.

#### Specific Use Restrictions:

1. Do not apply more than 7.35 fluid ounces per 1000 ft<sup>2</sup> (0.18 lb. ai/1000 ft<sup>2</sup>) per application.
2. Do not apply more than 58.8 fluid ounces per 1000 ft<sup>2</sup> (1. lb. ai/1000 ft<sup>2</sup>) per season.

**For turf use:** apply 1% to 2% solution (1 1/3 - 2 2/3 fluid ounces per 1 gallon of water). Spray at 1 gallon finished spray per 1000 ft<sup>2</sup>.

#### Specific Use Restrictions:

1. Do not apply more than 5.8 fluid ounces per 1000 ft<sup>2</sup> (0.14 lb. ai/1000 ft<sup>2</sup>) per application.
2. Do not apply more than 29 fluid ounces per 1000 ft<sup>2</sup> (0.7 lb. ai/1000 ft<sup>2</sup>) per season.

#### **DISEASE MONITORING:**



Sil-MATRIX™ is a broad spectrum, preventative fungicide. If not applied on a routine protectant spray schedule, observe plants for disease signs or symptoms. Apply appropriate fungicide, at the listed label use rate and spray schedule, at the first sign of disease, report of disease in the area, or during environmental conditions favorable for disease development.

#### **TREE FRUIT and NUT CROPS** (Including but not limited to)

Apples	Crabapple	Loquat
Mayhaw	Pear	Quince
Apricot	Cherry	Nectarine
Peach	Plum	Prune
Almond	Beech nut	Filbert
Butternut	Cashew	Chestnut
Chinquapin	Brazil nut	Macadamia
Hickory	Pecan	Walnut
Pistachio		

#### **BERRIES and VINE CROPS** (Including but not limited to)

Blackberry	Blueberry	Gooseberry
Loganberry	Raspberry	Strawberry
Grapes		

#### **VEGETABLES** (Including but not limited to)

Beet, garden	Chicory	Rutabaga
Beet, sugar	Ginseng	Salsify
Horseradish	Carrot	Parsley root
Celeriac	Radish	Turnip
Chervil	Potato	Cassava
Ginger	Sweet Potato	Yam
Garlic	Leek	
Onion	Shallot	Arugula
Celery	Endive	Fennel
Parsley	Radicchio	
Rhubarb	Spinach	Swiss chard
Broccoli	Brussels sprouts	Cabbage
Cauliflower	Collards	Kale
Kohlrabi	Mustard Greens	Lettuce
Beans	Broad bean	Chickpea
Lentil	Pea	
Cucumber	Gherkin	Pumpkin
Muskmelon	Squash	Watermelon
Eggplant	Pepper	Tomato

#### **ADDITIONAL CROPS** (Including but not limited to)

Artichoke	Asparagus	Chayote
Jojoba	Sesame	Sunflower
Tea	Tobacco	Sweet corn

#### **CITRUS FRUITS** (Including but not limited to)

Grapefruit	Orange	Lime
Lemon	Mandarin	Pummelo
Tangerine		

#### **TURF & ORNAMENTALS**

(Including but not limited to broadleaf shrubs and trees, flowering plants and bulbs, and foliage plants.)

**IMPORTANT NOTE:** Plant sensitivities to Sil-MATRIX™ have been found to be acceptable for plants listed on this label; however, it is impossible to

know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Sil-MATRIX™. Neither the manufacturer nor seller endorses use upon species not listed on the label, nor has it been determined that Sil-MATRIX™ can be safely used on ornamental or nursery plants not listed on this label. The user must determine if Sil-MATRIX™ can be used safely prior to use. In a small area, apply the listed rates to the plants in question, i.e. foliage, fruit, etc., and observe for 7-10 days for symptoms of phytotoxicity prior to use. **Do not apply foliar sprays to open blooms of Geranium, Marigold, Pansy, and Petunia.**

#### **BROADLEAF SHRUBS & TREES**

Andromeda	Ash	Aspen
Azalea	Buckeye	Camellia
Cherry Laurel	Crabapple	Dogwood
Eucalyptus	Euonymus	Firethorn
Flowering almond	Hawthorn	Holly
Flowering peach	Laurel	Lilac
Flowering quince	Magnolia	Maple
Flowering cherry	Oak	Red-tip
Flowering Plum	Poplar	Privet
Rhododendron	Sequoia	Spirea
Sycamore	Viburnum	Walnut

#### **FLOWERING PLANTS & BULBS**

African violet	Begonia	Carnation
Chrysanthemum	Crocus	Daffodil
Daisy	Geranium*	Gladiolus
Hollyhock	Hydrangea	Iris
Lily	Marigold*	Narcissus
Pansy*	Petunia*	Phlox
Rose	Statice	Tulip
Zinnia		

**\*NOTE:** Do not apply foliar sprays of Sil-MATRIX™ to open blooms of these species.

#### **FOLIAGE PLANTS**

Aglaonema	Palm	Artesia
Boston fern	Dracaena	Dumbcane
Fatsia	Ficus	Ruffle fern
Lipstick plant	Ming aralias	Oyster plant
Pachysandra	Parlor palm	Peperomia
Philodendron	Prayer plant	Syngonium
Zebra plant	Leatherleaf fern	

#### **STORAGE AND DISPOSAL**

**Pesticide Storage:** Keep pesticide in original container. Keep container tightly closed when not in use. Store product above 40°F. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Protect from excessive heat. Store in a cool, dry place.

**Container Disposal and Handling:** Nonrefillable container. Do not reuse or refill this container. If Empty: Place in the trash or offer for recycling if available. If Partly Filled: Call your local solid waste agency for disposal instructions. Never place unused pesticide down any indoor or outdoor drain.

Container Batch or Lot Code #

---

## Limited Warranty and Limitations of Liability and Remedies

---

**Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return unopened container at once to the seller for full refund of purchase price paid.**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control or suppression of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of PQ Corporation or the seller. PQ Corporation recommends that the user or grower test this product on a portion of the crop to determine suitability for the intended use. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment.

PQ Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the factors noted above which are beyond the control of PQ Corporation. To the extent allowed by law, the PQ Corporation makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent allowed by law, the exclusive remedy against PQ Corporation for any cause of action relating to the handling or use of this product shall be limited to, at PQ Corporation's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

To the extent allowed by law, PQ Corporation shall not be liable and any and all claims against PQ Corporation are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. PQ Corporation and the seller offer this product, and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

[Optional Warranty] [Notice: To the extent consistent with applicable law, the Buyer assumes all responsibility for safety and performance if this product is not used according to the directions.]

Sil-MATRIX™ is a registered trademark of PQ Corporation.

## Optional Marketing Claims

For [Use In] Organic Production  
For [Use In] Organic Gardening  
For {Use in} Organic Lawn Care  
Can be used in Organic Production  
Can be used in Organic Lawn Care

Place holder for three leaf organic symbol.

Use up to day of harvest.  
Harvest same day.

For use on edibles.

For use on [fruits] [,] [vegetables] [,] [nut]s [,]  
[For] Use on [lawns], [around home perimeter]  
] [ornamentals][flowers][roses] trees] [shrubs]  
[vegetables] [] [fruit trees]

Kills [listed] [Garden] [Insects][Bugs][Pests] [\*]  
Controls [Listed] Diseases {[\*]}

Kills [listed] [Insects] [Bugs][Pests] [\*] found on  
[fruits] [,] [vegetables] [,] nuts] [,] [ornamentals] [,]  
[(trees] [,] [(and) [&] [,] [shrubs]  
Controls the [listed] diseases [\*], protects lawn

[Note to Label Reviewer: Description of pests or  
diseases will be state as "listed" or with "\*\*". When  
the "\*" is used, there will be a statement cross  
references "\*" as listed"

### Formulation Properties

Concentrate  
Outdoor [Residential] Concentrate  
Concentrate makes X gallons [spray] where X  
depends on package size.  
Water based  
Virtually odor free  
Easy to use  
Formulated for use on [edibles] [,] [fruits] [,]  
[vegetables] [,] [&] [nuts]  
For outdoor [residential] use

[Questions] {???}  
Icons [Phone] [&] [Computer]  
Call [telephone number]  
[1] [one] [32 fl. oz.] [xx fl. oz.] yy gallons] [x quarts]  
[covers] [treats] XXX square feet [ sq., ft.]  
Treats X square feet [sq. ft.] of lawn where X  
depends on package size.



